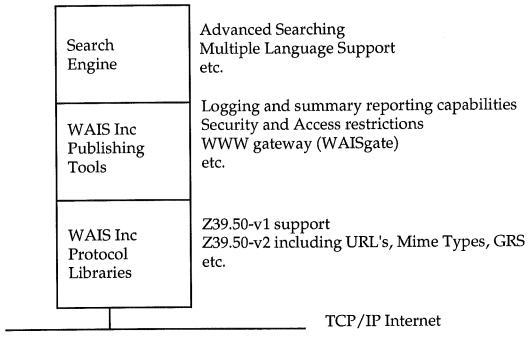
WAIS Network Publishing Protocol Toolkit

The WAIS™ Network Publishing Protocol Toolkit provides a high-level Application Programmers Interface (API) for client and server developers to leverage the growing Internet market. The server toolkit makes a backend search engine into a World Wide Web (WWW/Mosaic), Gopher, and Z39.50 server through gateways and the API. The client toolkit allows access to full-text Z39.50 servers. The API is independent of the network transport mechanisms and hides the details of the many underlying standards. Furthermore, as standards change or as new ones are widely adopted, this toolkit will be adapted and extended.



Freeware protocol libraries were first produced by Thinking Machines Corporation with gateways to Gopher and WWW. The WAIS Network Publishing Protocol Toolkit is commercially supported and is free for client use, and licensed for server use. The goal of the toolkit is to create an open architecture for information retrieval by using standard client-server Internet protocols.

Toolkit Features:

- Commercial quality toolkit for client and server developers.
- Supports browse, search, and hypertext links.
- API to WAIS, and gateways to WWW and Gopher.
- Runs over Internet (TCP/IP), and is extensible to other transports (IPX, Appletalk, ISDN, X.25, etc.).
- Server supported on UNIX® platforms; client supported on UNIX, MS-Windows®, and Macintosh® platforms.

Toolkit Includes

- Documented API implemented in portable ANSI C.
- Regular upgrades based on standards changes and additions.
- WAIS Network Publishing System conformance certification.
- Support and consulting available.

Supported Standards

- WAIS RFC client-server search and retrieve protocol suite (IETF).
- Hypertext Transfer Protocol (HTTP, World Wide Web, Mosaic) (IETF).
- The Internet Gopher Protocol (IETF).
- Z39.50-1988 Information Retrieval Service Definition and Protocol Specifications (ANSI/NISO).
- Z39.50-1992 Information Retrieval Service and Protocol (ANSI/NISO).
- ISO 10162/10163 Search and Retrieve (SR) Service Definition (ISO).
- Government Information Locator Service (GILS) Profile of Z3950-V2 (OIW-SIGLA).
- WAIS Profile of Z39.50-V2 (OIW SIGLA).
- Z39.50 over TCP/IP Profile (OIW SIGLA and IETF).
- Generic Record Syntax (ANSI/NISO).
- Server Source Description Specification (WAIS).
- MIME Content-Types (including HTML), for document formats (IETF).
- MIME Transfer Encoding (IETF).
- Uniform Resource Locators (URL) (IETF).
- Uniform Resource Names (URN) (IETF).
- Language Code Standard (ISO).
- Character Set Standard (ISO).

Standards being investigated:

- Security and Authentication: Kerberos (IETF), RSA (patented).
- Log file format standards.
- Billing system interfaces (EDI).
- Query formats: natural language, relevance feedback, Boolean operators, fielded search, spatial searching.
- Hardcopy and FAX delivery of documents.
- Submission of documents to a database.